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(71) 出願人 (米国を除く全ての指定国について): 有限会社川上製作所 (KAWAKAMI MFG.CO.,LTD.) [JP/JP]; 〒198-0023 東京都 青梅市 今井 2 - 1 1 3 5 - 2 Tokyo (JP). アネルバテクニクス株式会社 (ANELVA TECHNIX CORPORATION) [JP/JP]; 〒183-0035 東京都 府中市 四谷5丁目8番1号 Tokyo (JP).

(72) 発明者; および

(75) 発明者/出願人 (米国についてのみ): 川上 亨

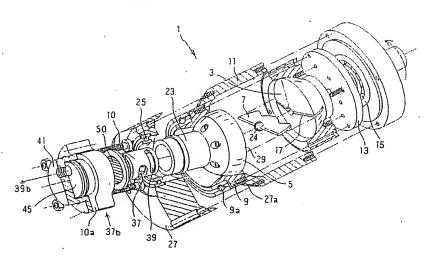
(KAWAKAMI,Tohru) [JP/JP]; 〒 198-0023 東京都青梅市 今井 2-1 1 3 5-2 Tokyo (JP). 川上 真(KAWAKAMI,Makoto) [JP/JP]; 〒198-0023 東京都青梅市今井 2-1 1 3 5-2 Tokyo (JP).

- (74) 代理人: 牧 哲郎、外(MAKI,Tetsuro et al.); 〒102-0094 東京都 千代田区 紀尾井町 3 番 6 号 秀和紀尾井町パー クビル402 Tokyo (JP).
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(54) Title: SWASH-PLATE VARIABLE VOLUME CHAMBER-TYPE FLUID MACHINE

(54) 発明の名称: 斜板容積可変室型流体機械



(57) Abstract: A swash-plate variable volume-type fluid machine where, without causing the increase in dimensions, weight, and power loss in the machine, fluid leakage is constrained and quietness and durability are achieved by a simple structure. A swash-plate variable volume-type fluid machine (61) has a conical body (3) and a circular plate body (5) that are rotatably and oppositely supported to each other with their center axes being intersected, and a peripheral wall (9) covering an outer periphery of the circular plate body (5) and having a spherical inner peripheral surface. Variable volume chambers (B, C, D) are formed with a contact line (A) between them by providing a partition plate (7) in a groove (17) of the conical body (3) and arranging the conical body (3) and the circular plate body (5) in line so as to be in contact with each other. Fluid is charged to and discharged from charge/discharge holes (31, 33) communicated with the variable volume chambers (B, C, D). A synchronous mechanism (29) is provided in the machine, and the mechanism causes the circular plate body (5) and the conical body (3) to rotate about their respective axes in a manner synchronized to each other.

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VO 2004/051088 A1

(AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI 特許 (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

2文字コード及び他の略語については、定期発行される各PCTガゼットの巻頭に掲載されている「コードと略語のガイダンスノート」を参照。

添付公開書類:

一 国際調査報告書

(57) 要約:

寸法や重量、動力損失を増大させずに、流体の漏れを押さえ、簡易な構成で静粛かつ耐久性を有する斜板容積可変室型流体機械を提供することを目的とする。

斜板容積可変室型流体機械(61)は、中心軸線を交差させてそれぞれ回転可能に互いに対向支持した円錐体(3)及び円板体(5)と、この円板体(5)の外周を覆い球面状の内周面を有する周壁(9)とを有する。さらに、円錐体(3)の溝(17)内に仕切板(7)を設け、円錐体(3)と円板体(5)とを線状に当接配置することで、当接線(A)を挟んで複数の容積可変室(B, C, D)を構成し、この容積可変室(B, C, D)と連通する給排孔(31, 33)から流体を給排させ、円板体5と円錐体3とをそれぞれの中心軸線について互いに同期して回転する同期機構(29)を設ける。

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International application No. PCT/JP03/12148

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A. CLASSIFICATION OF SUBJECT MATTER Int.Cl ⁷ F04C3/06, F04C18/54				
According to International Patent Classification (IPC) or to both national classification and IPC				
	SEARCHED		•	
	ocumentation searched (classification system followed Cl ⁷ F04C3/06, F04C18/00, F04C	by classification symbols) 18/54		
Jitsu	tion searched other than minimum documentation to the layo Shinan Koho 1922–1996 i Jitsuyo Shinan Koho 1971–2003	e extent that such documents are included Jitsuyo Shinan Toroku Koho Toroku Jitsuyo Shinan Koho	1996-2003	
Electronic d WPI	ata base consulted during the international search (nam	e of data base and, where practicable, sea	rch terms used)	
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category*	Citation of document, with indication, where ap	propriate, of the relevant passages	Relevant to claim No.	
	JP 2001-003876 A (Yugen Kais Seisakusho), 09 January, 2001 (09.01.01), Full text; all drawings (Family: none)	sha Kawakami	1-4	
A	JP 2000-087885 A (Yugen Kais Seisakusho), 28 March, 2000 (28.03.00), Full text; all drawings (Family: none)	sha Kawakami	1-4	
. A	JP 55-004956 B (Erebon Kabus 01 February, 1980 (01.02.80), Full text; Fig. 3 (Family: none)		1-4	
Further documents are listed in the continuation of Box C. See patent family annex.				
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed Date of the actual completion of the international search priority date and not in configuration understand the principle or the document of particular relevance considered novel or cannot be step when the document is the document of particular relevance and document of particular relevance considered novel or cannot be step when the document is the document of particular relevance and document of		priority date and not in conflict with th understand the principle or theory understand the considered novel or cannot be considered to involve an inventive ster combined with one or more other such combination being obvious to a person document member of the same patent of	with the application but cited to y underlying the invention the claimed invention cannot be assidered to involve an inventive alone the claimed invention cannot be estep when the document is such documents, such erson skilled in the art attent family	
Name and mailing address of the ISA/ Japanese Patent Office		Authorized officer		
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International application No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	
E,A	JP 2002-364572 A (Yugen Kaisha Kawakami Seisakusho), 18 December, 2002 (18.12.02),	1-4	
٠.	Full text; all drawings (Family: none)	*	
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